# AUTHORIZATION TO DISCHARGE UNDER THE OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM

#### PART I.

In compliance with the Oklahoma Pollutant Discharge Elimination System Act (OPDES Act), Title 27A O.S., § 2-6-201 *et seq.* and the rules of the State of Oklahoma Department of Environmental Quality (DEQ) adopted there under (See OAC 252:606); the Federal Clean Water Act, Public Law 95-217 (33 U.S.C. 1251 *et seq.*), Section 402; and NPDES Regulations (40 CFR Parts 122, 124 and 403),

City of Norman (State ID No. S-20616) P.O. Box 370 Norman, Oklahoma 73070

is hereby authorized to discharge treated wastewater from a facility located at approximately

S½, SE¼, SE¼, Section 7, Township 8N, Range 2WIM, Cleveland County, State of Oklahoma

to receiving water: The Canadian River at a point located approximately

Latitude: 35° 09' 58.99" N (GPS: NAD-27 CONUS) Longitude: 97° 26' 38.75" W (GPS: NAD-27 CONUS) Planning Segment No. 520610 (Water body ID # 520610010010)

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, III and IV hereof.

rnis permit replaces and/or supersed	les the previous permit issued on November 18, 1999.
The issuance date of this permit is _	February 7 , 2005.
This permit shall become effective _	March 1 , 2005.
This permit and authorization to disc	charge shall expire at midnight February 28, 2010.
For the Oklahoma Department of Environme	ental Quality:
Edward Dihrberg, P.E., Manager	Jon L. Craig, Director
Municipal Permits Section	Water Quality Division
Water Quality Division	valor Quality Division

### A. Effluent Limitations

## 1. Conventional and Non-conventional Pollutants

Final limits and reporting requirements are effective on the effective date and lasting through the expiration date of the permit. The permittee is authorized to discharge treated wastewater in accordance with the following limitations:

Effluent Characteristics <sup>a</sup>		Discharge Limitations				Monitoring Requirements	
		Mass (lbs/d)	Concentration (mg/l)			Measurement	Sample
		Monthly Avg	Monthly Avg	Weekl y Avg	Daily Max	Frequency	Type
Carbonaceous	Apr – May	1301.0	13	19.5		2/week	24 ha
Biochemical Oxygen Demand, 5-Day	Jun – Oct	1301.0	13	19.5		2/week	24-hr Comp.
(CBOD <sub>5</sub> ) [80082]	Nov – Mar	2502.0	25	37.5		2/week	1
Total Suspended Solids (TSS) [00530]	Year round	3002.4	30	45		2/week	24-hr Comp.
Ammonia (NH <sub>3</sub> -N) [00610]	Year round	410.3	4.1		9.9	3/week b	24-hr Comp.
Dissolved Oxygen [00300]	Year round		Instantaneous minimum: 5			Daily	Grab

Units are mg/l, unless otherwise specified

for frequency reduction shown in OAC 252:690-3-26.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

There shall be no discharge of any visible sheen of oil or globules of oil or grease.

The pH [00400] shall not be less than 6.5 standard units nor greater than 9.0 standard units at anytime and shall be monitored by grab samples collected daily.

Samples taken in compliance with the monitoring requirements specified in the permit shall be taken at the discharge from the final treatment unit.

Flow (measured in million gallons per day) shall be monitored daily by totalized measurement and reported as a 30-day average and a daily maximum.

All monitoring and reporting requirements shall also be in compliance with Section III of this permit.

## 2. Whole Effluent Toxicity Reporting and Monitoring Requirements (Outfall TX1)

Monitoring frequency may be reduced to 1/week after one year of monitoring if the monitoring results meet the requirements

During the period beginning the effective date of the permit and lasting through the expiration date, the permittee is authorized to discharge from Outfall TX1 (functionally identical to Outfall 001). Such discharges shall be limited and monitored by the permittee as specified below:

Whole Effluent Toxicity Monitoring and Reporting Requirements (Outfall TX1)

Effluent Characteristic			Reporting/Monitoring Requirements <sup>a</sup>		
Test	Critical Dilution	Parameter	7-day Min	Testing Frequency b	Sample Type
		Pass/Fail Survival [TLP3B]	Report		
Cariodanhnia dubia		NOEC <sub>L</sub> Survival [TOP3B]	Report		24-hr comp
Ceriodaphnia dubia, 7-day chronic NOEC static renewal, freshwater	100 %	% Mortality at Critical Dilution [TJP3B]	Report	1/quarter	
		Pass/Fail Reproduction [TGP3B]	Report		
		NOEC <sub>S</sub> Reproduction [TPP3B]	Report		
		% Coeff of Variation [TQP3B]	Report		
		Pass/Fail Survival [TLP6C]	Report		
Pimephales promelas		NOEC <sub>L</sub> Survival [TOP6C]	Report		
(Fathead minnow), 7-day chronic NOEC static renewal, freshwater		% Mortality at Critical Dilution [TJP6C]	Report 1/quarter		24-hr comp
		Pass/Fail Growth [TGP6C] Re		]	
		NOEC <sub>s</sub> Growth [TPP6C]	Report		
		% Coeff of Variation [TQP6C]	Report		

<sup>&</sup>lt;sup>a</sup> See Part II, Section A, Whole Effluent Toxicity Limit; and Section B, Whole Effluent Toxicity Testing for additional monitoring and reporting conditions.

## Whole Effluent Toxicity Limit and Monitoring Requirements (Outfall TX1)

	Reporting/Monitoring Requirements <sup>a</sup>			
Effluent Characteristic	7-day Min	Testing Frequency <sup>b</sup>	Sample Type	
Whole Effluent Toxicity Limit ( <i>Ceriodaphnia dubia only</i> ) {STORET 22414}	100 %	1/quarter	24-hr comp	

See Part II, Section A, Whole Effluent Toxicity Limit, for additional monitoring and reporting conditions.

Whole effluent toxicity monitoring and reporting requirements apply beginning the effective date of the permit.

Compliance with Whole Effluent Toxicity limit is required beginning the effective date of the permit.

Results of retests conducted pursuant to prior test failure shall <u>not</u> be submitted on DMRs in lieu of routine test results unless routine monitoring frequency is monthly.

Results of retests conducted pursuant to prior test failure shall <u>not</u> be submitted on DMRs in lieu of routine test results.

**WET testing summary reports**: Reports of all WET testing initiated, regardless of whether such tests are carried to completion, shall follow the requirements of Permit Part II, Section A, Item 3 and Section B, Item 4.

Concurrent testing provision for chronic WET testing: Concurrent analysis of total ammonia and pH is required for each individual effluent sample collected for chronic WET testing or retesting of the Fathead minnow species. Reporting of concurrent testing results shall be in accordance with the following requirements. Results shall also be submitted in or concurrently with each WET test report.

# Concurrent Effluent Testing for Chronic WET Tests – Reporting Requirements Outfall TX1

	Concentration			Monitoring Requirements		
Effluent Characteristic	Daily Min	Monthly Avg	Daily Max	Monitoring Frequency	Sample Type	
Ammonia, total (mg/l) <sup>a</sup> [STORET 00610]	Report	Report	Report	1/quarter	24-hr comp <sup>b</sup>	
pH (std units) <sup>a</sup> [STORET 00400]	Report	N/A	Report	1/quarter	Measured in each composite effluent sample, including static renewals, just prior to first use b	

<sup>&</sup>lt;sup>a</sup> Report <u>only</u> those effluent samples collected for WET testing of Fathead minnow species. Results of concurrent

testing of pH and total ammonia shall not be used to satisfy reporting requirements that are specified elsewhere in the permit for Outfall 001.

**Sampling Location:** Samples taken in compliance with the monitoring requirements specified above for Outfall TX1 shall be taken at the following location: at the same location as for Outfall 001.

## **B.** Sanitary Sewer Overflows

Any bypass in the collection system [sanitary sewer overflow (SSO)] shall be reported in accordance with Part III.B.6. of this permit.

#### C. Re-opener Clause

This permit may be reopened for modification and reissuance to require additional monitoring and/or effluent limitations where actual or potential exceedances of State water quality criteria are determined to be the result of any TMDL completed for pathogens, turbidity, TDS, or pH for the receiving stream. Modification and reissuance of the permit shall follow regulations listed at 40 CFR Part 124.

Concurrent ammonia analyses must be performed on the composite samples actually delivered to the biomonitoring laboratory and used for WET testing purposes, not a separate sample collected at the same time the WET testing sample is collected. Just prior to first use of each composite sample for WET testing purposes, the biomonimonitoring laboratory shall take an adequately-sized portion of each composite sample, acidify it in accordance with preservation requirements in 40 CFR 136, and have it analyzed for total ammonia. The pH measurement reflected in the above table must be taken just prior to the acidification step.